

Patent Claims

1. A fuel in the form of compacts with a content of plant material, characterized in that the fuel is comprised substantially of:

- a) a straw or straw components and
- b) comminuted hardwood and/or cocoanut shells

whereby both the straw or the straw components as well as the hardwood or cocoanut shells are digested with microorganisms.

2. The fuel according to claim 1 characterized in that it is binder free.

3. The fuel according to claim 1 or claim 2 characterized in that the straw is selected from the group of hemp straw, linen straw and rye straw, rice straw, barley straw or components of this type of straw (straw shavings) from which fiber components have been removed.

4. The fuel according to one of claims 1 to 3 characterized in that straw or straw component has a particle size of 0.5 to 2.0 cm and the hardwood or coconut shell particles a particle size of about 0.5 to 0.7 cm.

5. A fuel according to one of claims 1 to 4 characterized in that the microorganisms used for the digestion (fermentation) comprises a mixture of lactic acid bacteria, yeasts, photosynthesis bacteria, actinomactinomycetes and fungi.

5 6. The fuel according to one of claims 1 to 5 characterized in that the compacts (1) and the hole (4), are preferably of ring shape.

7. The fuel according to claim 6 characterized in that an ignition promoter (2) is arranged in the hole (4) and optionally
10 also a hole (5).

8. The fuel according to one of claims 1 to 6 wherein the organism promoter (2) is arranged on one of the flat sides of the compact (1).

9. The fuel according to one of claims 1 to 8
15 characterized in that the compact is externally coated with a water repellant coating which can burn without residue preferably stearin.

10. The fuel according to one of claims 1 to 9 characterized in that the ignition promoter is comprised of a combustible mixture of plant chips or dust and a binder like stearin which burns without a residue.

5 11. The fuel according to one of claims 1 to 10 characterized in that the compact has a proportion of inorganic material, preferably limestone granules, admixed thereto.

10 12. A method of producing fuel compacts in accordance with one of the claims 1 to 11 characterized in that the straw or straw component and the comminuted hardwood and/or cocoanut shell component are moistened with a microorganism suspension and allowed to ferment for about 2 to 4 weeks, whereby the fermentation of the straw component is effected aerobically or anaerobically and the 5 fermentation of the hardwood particles or coconut shell particles is carried out anaerobically, and that the fermented component, 15 comminuted if necessary, optionally with addition of a proportion of inorganic substance like limestone granules, is mixed and dried and then pressed at a pressure of preferably 700 to 900 kg/cm² to 20 compacts.

20 13. The method according to claim 12 characterized in that the compacts are provided with a water repellant coating like stearin which burns without a residue by immersion or spraying.